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Appln. Serial No. 09/945,193
Amendment dated September 27, 2007
Reply to Office Action Mailed June 27, 2007AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1-28. (Cancelled)

1 29. (Currently Amended) The method of claim ~~[[28]]~~ 42, wherein computing the costs based
2 on the probabilities of over-predicting the parts comprises computing the costs associated with
3 unnecessarily sending the corresponding parts to the onsite repair.

1 30. (Currently Amended) The method of claim ~~[[28]]~~ 42, wherein computing the costs based
2 on the probabilities of under-predicting the parts comprises computing the costs associated with
3 not sending the corresponding parts when needed to the onsite repair.

1 31. (Cancelled)

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1 32. (Previously Presented) A method executed by a computer, comprising:
2 determining costs of mis-predicting parts that may be replaced during an onsite repair of
3 a product in response to a repair history;
4 selecting a subset of the parts to be sent to the onsite repair in response to the costs; and
5 identifying a set of symptoms associated with the product,
6 wherein determining the costs comprises determining a cost of mis-predicting a subgroup
7 of the parts according to parameters indicating at least:

8 (1) a number of trips that the set of symptoms were reported, the subgroup of
9 parts were sent, and at least one part not in the subgroup of parts was needed to complete the
10 onsite repair; and

11 (2) a number of trips that the set of symptoms were reported, the subgroup of
12 parts were sent, and the subgroup of parts included at least one part that was unnecessary in the
13 onsite repair.

1 33. (Currently Amended) The method of claim ~~[[28]]~~ 42, wherein computing the costs based
2 on the probabilities of over-predicting and under-predicting is according to:

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- 3 numbers of times that the corresponding parts were under-predicted;
4 numbers of times that the corresponding parts were over-predicted;
5 numbers of times that the corresponding parts were correctly predicted.

- 1 34. (Previously Presented) The method of claim 33, further comprising:
2 computing the probabilities of under-predicting the parts using the numbers of times that
3 the parts were under-predicted; and
4 computing the probabilities of over-predicting the parts using the numbers of times the
5 parts were over-predicted.

- 1 35. (Cancelled)

- 1 36. (Currently Amended) The method of claim [[28]] 42, wherein determining the costs
2 includes determining an average of the costs associated with under-predicting and over-
3 predicting the parts.

- 1 37. (Currently Amended) The method of claim [[28]] 42, wherein selecting the subset of the
2 parts includes selecting the subset of the parts for transport to the onsite repair.

- 1 38. (Currently Amended) ~~The method of claim 28, A method executed by a computer,~~
2 comprising:
3 determining costs of mis-predicting parts that may be replaced during an onsite repair of
4 a product in response to a repair history, wherein the costs are computed based on probabilities
5 of over-predicting and under-predicting the parts;
6 selecting a subset of the parts to be sent to the onsite repair in response to the costs; and
7 ~~wherein selecting the subset of the parts includes selecting the~~ selecting another subset of
8 the parts for training of call qualifiers in response to the costs.

- 1 39. (Currently Amended) The method of claim [[28]] 42, wherein selecting the subset of the
2 parts includes selecting the subset of the parts for flagging to call qualifiers.

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1 40. (Currently Amended) The method of claim [[28]] 42, wherein selecting the subset of the
2 parts includes selecting the subset of the parts for stocking a repair vehicle.

1 41. (Currently Amended) The method of claim [[28]] 42, further comprising determining
2 which products are least desirable to support in response to the costs.

1 42. (Currently Amended) ~~The method of claim 28, further comprising~~ A method executed by
2 a computer, comprising:
3 determining costs of mis-predicting parts that may be replaced during an onsite repair of
4 a product in response to a repair history, wherein the costs are computed based on probabilities
5 of over-predicting and under-predicting the parts;
6 selecting a subset of the parts to be sent to the onsite repair in response to the costs; and
7 determining which personnel to target for additional training in response to the costs.

1 43. (Cancelled).

1 44. (Currently Amended) ~~The apparatus of claim 43,~~ An apparatus having a computing
2 device that determines costs of mis-predicting parts that may be replaced during an onsite repair
3 of a product in response to a repair history and that selects a subset of the parts to be sent to the
4 onsite repair in response to the costs,
5 wherein the costs are computed based on probabilities of over-predicting and under-
6 predicting the parts,
7 wherein the computing device computes the costs based on the probabilities by
8 determining numbers of times that the corresponding parts were under-predicted and numbers of
9 times that the parts were over-predicted and numbers of times that the corresponding parts were
10 correctly predicted, the repair history containing the numbers of times that the corresponding
11 parts were under-predicted, the numbers of times that the parts were over-predicted, and the
12 numbers of times that the corresponding parts were correctly predicted.

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1 45. (Previously Presented) An apparatus having a computing device that determines costs of
2 mis-predicting parts that may be replaced during an onsite repair of a product in response to a
3 repair history and that selects a subset of the parts to be sent to the onsite repair in response to the
4 costs,

5 wherein the costs comprise a cost of mis-predicting a subgroup of the parts according to
6 parameters indicating at least:

7 (1) a number of trips that a set of symptoms were reported, the subgroup of parts
8 were sent, and at least one part not in the subgroup of parts was needed to complete the onsite
9 repair; and

10 (2) a number of trips that the set of symptoms were reported, the subgroup of
11 parts were sent, and the subgroup of parts included at least one part that was unnecessary in the
12 onsite repair.

1 46. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the repair history
2 includes an identification of a set of parts sent to a set of prior onsite repairs and a list of actual
3 parts needed in the prior onsite repairs.

1 47. (Cancelled)

1 48. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the costs determined by
2 the computing device comprise waste metrics for a plurality of sets of parts and the subset of
3 parts selected comprises less than all the sets of parts for the onsite repair in response to the
4 waste metrics.

1 49. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the parts are selected for
2 transport to the onsite repair.

1 50. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the parts are selected for
2 training of call qualifiers.

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1 51. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the parts are selected for
2 flagging to call qualifiers.

1 52. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the parts are selected for
2 stocking a repair vehicle.

1 53. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the computing device
2 determines which products are least desirable to support in response to the costs.

1 54. (Currently Amended) The apparatus of claim ~~[[43]]~~ 44, wherein the computing device
2 determines which personnel to target for additional training in response to the costs.

1 55. (Currently Amended) The method of claim ~~[[28]]~~ 42, wherein determining the costs of
2 mis-predicting the parts is for a particular onsite repair of a particular product, and wherein
3 selecting the subset of the parts is for the particular onsite repair of the particular product.

1 56. (Currently Amended) The method of claim ~~[[28]]~~ 42, wherein determining the costs of
2 mis-predicting parts comprises determining the costs of mis-predicting corresponding sets of
3 parts.

1 57. (Previously Presented) The method of claim 56, wherein selecting the subset of parts
2 comprises selecting less than all of the sets of parts.

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1 58. (Currently Amended) ~~The method of claim 28,~~ A method executed by a computer,
2 comprising:
3 determining costs of mis-predicting parts that may be replaced during an onsite repair of
4 a product in response to a repair history, wherein the costs are computed based on probabilities
5 of over-predicting and under-predicting the parts; and
6 selecting a subset of the parts to be sent to the onsite repair in response to the costs,
7 wherein determining the costs of mis-predicting comprises determining expected wastes
8 for the corresponding parts, wherein each expected waste is computed based on a number of
9 times the corresponding part was under-predicted, a number of times the corresponding part was
10 over-predicted, a number of times the corresponding part was correctly predicted, a cost of over-
11 predicting the corresponding part, and a cost of under-predicting the corresponding part, wherein
12 the repair history contains the number of times the corresponding part was under-predicted, the
13 number of times the corresponding part was over-predicted, and the number of times the
14 corresponding part was correctly predicted.

1 59. (Currently Amended) The method of claim ~~[[28]]~~ 42, wherein computing the costs based
2 on the probabilities of over-predicting and under-predicting takes into account a cost of an extra
3 trip to a repair site and a cost of one of restocking and storing an unneeded part.

1 60. (Currently Amended) The method of claim ~~[[28]]~~ 42, wherein selecting the subset of
2 parts comprises selecting less than all the parts.

1 61. (Cancelled).